BUILT ON LINES NEW IN ECCLE-SIASTICAL ARCHITECTURE.

Its Designers Have Sought to Seive the Problem of Making a Church Conspicu-ous Among Dig Commercial Buildings - Features in Which It Differs From Other Churches-Not "Institutional."

All who pass through Madison Square see the massive commercial structures which are about it. Their towering proportions make conspicuous by contrast a comparatively little building which lifts its dome without pretension among them.

Presently one wonders what this is and then he discovers that it is out of the common order of architecture; its bright colors give it a unique appearance. is really an ecclesiastical gem in the midst of a commercial setting. It is the new Madison Square Presbyterian Church, of which the Rev. Dr. Charles H. Park-

for the Church is held forever. So perhaps his new church may be permanent. Mr. White of McKim, Meade & White, the designer of this new church, says of

"The style of architecture of the Madion Square Presbyterian Church is that of the early Christian, with a modified Byzanertain extent a protest against the prevaidea among laymen that a building to be churchlike must be built in mediæ-

"The style of architecture known as Gothic has nothing to do with the simple forms of early Christian religion, or with that of the Refor ation, or with the style of archi- and in due time doubtless on the north tecture which prevailed in our own country when it had its birth as a nation.

"All these, which belong to the Protestant religion and to us, have no affiliations whatsoever with Gothic, but with the classic style. The Gothic or mediæval form of architecture belongs absolutely to the Roman Catholic Church, and was developed hurst is the minister.

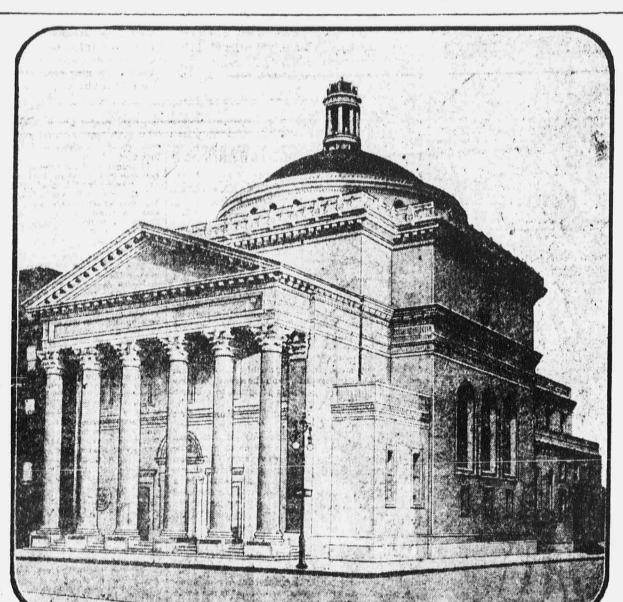
It naturally suggests the question: Has which obtained from the ninth to the fif-

DR.PARKHURST'S NEW CHURCH | planted, as if the spot of earth once gained | and scientific system of indirect low pressure steam apparatus, the warm air being sure steam apparatus, the warm air being blown into the auditorium and the foul air being drawn out by means of powerful

The pulpit platform and all that part of the interior being of marble and mosaic makes the substantial and enduring effect of the place impressive. The two organs ine treatment in the interior. It is to a cannot help making a pleasing effect in the service, as they do in the decoration of the interior. The effect of the auditorium, as one stands and looks about with his mind susceptible to the impressions from surroundings, is very pleasing and uplifting.

The church, facing Madison Square, and surrounded on the south and east, also, by very high buildings, had to be treated much as a jewel, but on a scale to prevent its being crushed by the tall build-ings about it. The portico, with its great columns, is so imposing as to make the church, though small beside its neighbors, hold a strong place in one's view as he looks from the park opposite.

Its marble base, like the buildings about it, makes it seem to stand on an equal footing with them, while its various colors and



THE REV. DR. PARKHURST'S NEW CHURCH.

"Nor is the plan of the churches and

a modern church, but is properly fitted only

shadowed religion? Once the great cathedrals lifted their majestic forms far above other buildings, but to-day in this me-

has been a landmark in Madison Square. It seemed that this might stand for centuries, but the commercial tide came on and on, and in spite of all the memories which are connected with the building, famous for its work and for its pastor, it had to give place to the enormous commercial structure which had already reared itself about it so as to obscure it and is soon to be a solid square almost as high as the spire of the church and to have a tower on the site of the church far higher than that spire has been.

Pushed out of its old site, dislodged from where it has been so long, the church plants itself on the corner opposite and builds a structure which appears to be able to withstand the erosion of weather and even fire; for the materials which are put into its construction are of the most enduring kind, the most nearly fireproof that have ever been employed in architecture. But will even this withstand the apparently irresistible march of commerce, some of the parishioners ask.

The great cathedrals of Europe will doubtless remain, whatever may be the advancements of business or the migrations of population. Westminster Abbey and St. Paul's in London will undoubtedly endure for ages. Our own old Trinity in Manhattan still stands amid the wealth and the rush of downtown, on one of the greatest of thoroughfares and facing a street the name of which is synonymous with finance. Broadway and Wall street are doubtless

known as widely as any other business streets in the world. Yet this church is filled at service time with people who seek to worship there, proving that there are some people who will go to their church, wherever it may be and wherever they may remove for their abode. Roman Catholics rarely sell a site and go with the tide of population, a church standing where once

CHAT OF TWO BLIND MEN.

Chums on Riverside Drive Talk of Color

Schemes and Smell an Automobile.

Side is two blind men who are chums. They

live within a few blocks of each other.

One of the sights on the upper West

Except in stormy weather or in case

of illness these two men are out for a stroll

on Riverside Drive every day. They

The elder had wandered off his beat a d

became friends in a rather singular way.

had bec me confused. He waited unti

he heard the approach of somebody. He

hailed the newcomer and explained his

"I am blind myself," said the newcomer.

"But I know where I am." As the blind

Then they agreed to go out toge ber

The elder usually calls for his churn, but

One has been blind from birth. The

other lost his sight twenty years ago. The

latter knows what he has seen and ex-

plains things to his comrade. The one

whose life has been spent in darkness has

The two were on one of their accustomed

strolls in the vicinity of Grant's tomb one

some ideas of shape, but none of color.

If he is la-e the junior calls for the senior.

led the blind hey became acquainted.

auditorium, with simple vestibule and low galleries which do not project into the As one enters the church the great pillars

body of the church.

are the first thing to make an impression on him: for they are of green granite and are thirty feet high, overweighing anything of the sort in the vicinity. The portico. made of these pillars standing upon white marble pedestals and topped with beautiful rich capitals and a finely proportioned roof, blue and green and yellow colors peeking out from behind the ornaments, is a very pleasing structure. One is reminded of the Saint Sophia, in Constantinople, as he observes this church, for the style is similar, though of course the New York building is very small compared with the

This is a speaking church rather than a ceremonial church; so it has been made as nearly perfect acoustically as possible. One remarks as he enters the auditorium that the greatest dimension of the place is upward, the height exceeding the length a suggestion of the spiritual and lofty purpose and character of the building. Away in the top of the high dome is the lantern, as it is called, through which falls the sunlight, bringing out the beautiful decorations of the inner vault of the spherical

Light also enters the dome from a row of windows at its base all around. Then, lower down, are the great south windows, shedding on all the interior the rich tints of the stained glass as the sun floods through. The white walls on all sides reflect and scatter the light throughout the auditorium, the effect of which will be cheery and delightful. Metal lanterns, suspended from the dome, will give the

dome, gold and mosaic predominating.

principal artificial light. The heating and ventilating are effected

its figured bricks and terra cotta give it a cathedrals built in medieval style that of character all its own. The bricks are specially moulded; the terra cotta is semi-

tropelis many a church has given way before the onward march of commerce.

The Broadway Tabernacle has done this several times, having recently settled itself down miles from where it began its historic career of service. Fifty years ago a body of Christian people built the ago a body of Christian people built the substantial structure whose high spire

The Broadway Tabernacle has done to the forms and rituals of the Catholic Church. In the design of the Madison Square Presbyterian Church the chief aim is to treat it as a modern church and in a style natural to and belonging to the religion which it represents and the country in which it is built."

The plan of the Catholic Running through the brick wall is a checker of slightly varying color, at the intersections of which the heads are stamped with a square cross. As a foil to the white marble of the surrounding buildings, the terra cotta has a liberal showing of blues, greens and yellows running through it to the forms and rituals of the Catholic Running through the brick wall is a checker of slightly varying color, at the intersections of which the heads are stamped with a square cross. As a foil to the white marble of the surrounding buildings, the terra cotta has a liberal showing of blues, greens and yellows running through it.

The plan of the Catholic Running through the brick wall is a checker of slightly varying color, at the intersections of which the heads are stamped with a square cross. As a foil to the white marble of the surrounding buildings, the terra cotta has a liberal structure. The form in the catholic Running through the brick wall is a checker of slightly varying color, at the intersections of which the heads are stamped with a square cross. As a foil to the white marble of the surrounding buildings, the terra cotta has a liberal showing of blues, and the curve is sent and reduced to a hone finish.

The begin is a modern church and in a style nation of the middle engine of the middle engine of the middle engine of the middle engine of th imparting a rare effect. Pale yellow and green tiles cover the dome, which is surmounted by the lantern, with its copper roof, this and the finial being treated in gold.

The dimensions of the church may be gathered from the statement that the front on Madison Square is 75 feet in extent, the depth in Twenty-fourth street being 103 feet. Connected with it is the parish house with a frontage in Twenty-fourth street of 47 feet, the depth being 85 feet.

The top of the main cornice of the church is 47% feet from the ground. Above this the dome begins, 69 feet above grade, and is 52 feet 4 inches inside diameter and 24 feet high, spherical. The top of the lantern is 113 feet above grade.

As Dr. Parkhurst says, "This is in no sense an institutional church." It does not attempt to furnish baths, a gymnasium and other such things; though in the basement there is a large room which might easily be made into a gymnasium if desired at any

The interior of the parish house is well arranged, and the rooms impress one as admirably adapted for the various uses for which they are designed. The Sunday school and prayer meeting rooms and the parlors are all of commodious size. The same appearance of enduring construction pervades this as does the church.

"Do you not feel regret at leaving the old church?" Dr. Parkhurst was asked. "Somewhat. Yet some of the oldest and stanchest members were foremost in the new movement. There is nothing new or striking in the new church; there is no attempt to bring in any new fads. We are simply building thor u hly. It is not an institutional church, as some are called. though the plans call for a gymnasium in the basement of the parish house at the east

by means of the most approved modern

"You mean," replied his chum, "that

autumn will soon be gone, and we won't

"That's it. The trees will be barren. It

the landscape, the hills beyond, is

his comrade, who in his day had

always looks so cheerless in winter. Just

glorious."

"I like the hills," replied the one who had never seen one. "I know what a hill is like, because I get tired when I go up. But I do not understand the color scheme you rocke of "

seen the scheme work out and had seen its

decadence, explained in his way the changes

of the leaves. His churn was a jolly fellow, despite his world of darkness.
"Well," he replied, "you know I am color blind. All shades are alike to me. I

wouldn't make a salesman in a dry goods store for that reason. But then you know

I am not bothered in selecting my neck-

wear. Any old necktie is good enough for me. I suppose you are finnicky about

"Yes, I am," was the retort. "There are some colors I wouldn't wear. If there is anything I hate it is a jumble of color.

Then the man blind from birth asked:

"By the way, what is the color, as you call it, of this Grant tomb. As often as

we have been up here I have never thought

The twenty-year-old blind one looked

things of the world.

have so many walks,"

over in the direction of the mausoleum and said the one who in his time had seen some replied:
"Used to be white, but it has grown a bit dingy from the weather. It is now a dirty of the beauties as well as some of the ugly

end of the building."

gray."
"But the building—it is nearly square in shape, is it not? I have been in it and around it. It struck me as being nearly

Just then an auto choo-chooed by.
"I wonder what an automobile looks
ke," said the man whose sight had flashed out before the new invention.

"I have no curiosity to see one," was the reply. "But I suppose people who can see

and who use them have no sense of smell I should not want to see and smell both."

Then they laughed.
"It looks like a storm over there in the

east, and I guess we had better move along, said the elder.

As they walked away they chatted cheerly. In fact they seemed jollier than the man who had occupied the seat with them and who had heard the talk, for he was a dyspeptic; he also had a strange idea about colors. To him everything

What They May Expect.

From the Atlanta Constitution. A blizzard was blowing and the window of the meeting house rattled. When Brother

Williams said: weather's freezin', dar won't be no sermon terday. But, all you backslidin' sinners come up here, en hug dis red-hot stove a while, en git climatized ter what's comin'!"

## THREE TRAINS IN A WRECK

THE BIG RECORD MADE BY A LITTLE RAILROAD.

Three Locomotives and Some Ninety Cars, Only One Locomotive and Hair a Dozen Cars Escaped Destruction in a Runaway Down a Steep Mountain.

The worst freight wreck that ever happened on any railroad in the United States, or in the world, for that matter, took place on the little Georges Creek and Cumberland Railroad that was bought the other day by the Wabash interests," said a re-tired railroad engineer. "Though one of the smallest and least heard of roads in this country, yet in some ways it is the most remarkable.

"The whole road is only forty-seven miles long, but it is the greatest coal carrying road in the world for its size, being the only outlet for the great soft coal mines at Lonaconing and Mount Savage, Md., right in the heart of the Alleghany mountains. Its terminus is Cumberland, Md. where it connects with the Baltimore and

"It has the heaviest grades in the country, in places more than 200 feet to the mile. It always was the first road to buy the biggest engines that came out, and it needed them to climb the steep hills, but it was in coming down that the real trouble came, for the trains ran away nearly every time they came over the mountains.

"In those days, when I first started to railroad there, air brakes were not known on freight cars, and an engineer had to trust altogether to his brakemen to let him down the steep places easy. As a rule the brakemen were careless. It was on account of the lack of brakes that the big wreck came about.

"It took place shortly after the coming into use of the mogul engines-hogs, we all called them, because they seemed to be able to pull all the cars you could hitch on behind. At that time they were thought to be just about the limit for size.

"They weighed about sixty tons, and had four driving wheels on each side, with a small pony wheel in front. The first steam brake ever invented was fastened to each one of the hogs to help the engineers to hold back their trains. The brake was nothing more than a wedge shaped piece of steel, worked by steam, that was dropped between the two middle drivers. The middle drive wheels had no flanges.

"I was running a freight engine, and it the freight trains of one convoy to wait for each other at the top of the steepest grade, couple together, and th n all run down the hill in one train for better control. One bitter cold night we had three trains coupled together, and my engine was on the front

"Each train had a crew of six men and

"Each train had a crew of six men and from twenty-five to thirty cars. The brakesmen had a lot of trouble to get their brakes to work right that night, and as a fact on account of the cold they didn't put down as many as they ought.

"Well, before we got half way down the hill we started to run away. All the engineers whistled for brakes, but we might as well have saved the steam. By this time we were going so fast and the cars were tossing about and swaying so that it was just about as much as a man's life was worth to make a move, and the brakemen hung on wherever they happened to be and hung on wherever they happened to be and rooted that verything would turn out all

The grade here was more than 200 feet "The grade here was more than 200 feet to the mile, and we swung around curves all the way down the mountain as if on the wheels of one side. There was one very sharp curve a couple of miles further down that we feared more than all the rest put together.

engineer and fireman of the middle engine jumped, and soon were followed by the two brakemen and the conductor of the same train. "Then the engineer of the hind train reversed his engine just as we started to round the curve. The same thing hap-

pened to his cylinders, as he might have foreseen, for I'll bet there never was a cylinder head yet made that could hold up under that pressure.

"I didn't try to reverse my engine, as I knew it would be of no use, and I reckoned

that if we were lucky enough to stay on e rails until we got to the foot of the moun tain that I might get the train under con-"At this minute I thought of the new

steam brake, which had been all forgotten in the excitement, and I don't suppose the other engineers had remembered about it

"As soon as I dropped the big wedge in between the flying drivers the four heavy wheels blocked together and the whole thing lifted about four inches off the rails as prettily as anything you ever saw about scared out of me what little life "We rounded the bad curve all right, though I can't make out to this day how

we ever stuck to the track. It seemed a minute as if the engine would climb r over the rails and keep on through air straight over the deep valley that lay just outside our track, a sheer fall of a couple of hundred feet.

couple of hundred feet.

"By this time, as we had come through so many ticklish places without mishap, we were beginning to think we might pull through all right after all. But we had another think. For just then an axle broke on one of the cars about half way back on my train and began to rip and began conveying that got in its way.

bang everything that got in its way.

"This made the men start to jump in earnest, for all knew we were in for a wreck It was only a question of time and place when the car would leave the track. Some of the men still stuck to the train, though, taking the long chance. To jump or not to jump is a question that never has been settled by railroaders, and I don't think it

As we expected, the car with the broken "As we expected, the car with the broken axle jumped the rails a quarter of a mile further down the hill, and the rest of the engines and cars went after it like a drove of sheep following their leader. They ran along the track for a short distance and then the cars tumbled over a trestle a hundred feet high one after the other until dred feet high one after the other until there was nothing left on the rails but my engine and a half dozen cars behind. The coupling pin had broken and kept us from

being pulled over with the rest of the wreck.

"The two engines and eighty-odd cars completely filled the ravine and came up almost level with the trestle. Out of the eighteen men, six were killed outright and eight were badly hurt. The only ones who excared were the firemen of my engine, the escaped were the fireman of my engine, the conductor and brakeman of our train were riding on the engine, and myself.

"After the men were taken from wreck the company made no attempt to save anything, but set fire to the mass of cars and engines and coal, and burned the whole heap as it lay."

Hound That Crows Like a Rooster. Evansville correspondence Indianapolis News. Samuel Raley, a farmer living a few miles from this city, owns a dog that crows like a coster. Before giving vent to a crow the dog stretches himself on his back and gives

a loud yell. or at the break of day the dog is quick to get into the contest. Mr. Raley has one rooster for which the dog seems to have a special affinity. When the the dog is sure to do likewise. When the rooster crows

The crowing dog is an ordinary fox hound, but is worthless for all purposes for which

## STORIES OF ANIMAL LIFE. Wild Cat Attacks Train.

From the St. Anaustine Record.

At the feet of Orange street, as the fore-

noon train rushed by this morning, a wildcat sprang from the bushes and attacked it. The creature sprang on the cowcatcher, but was hurled to one side.

Undaunted, the ferocious beast made a desperate onslaught on the moving train, and the second time was struck by the train, and thrown to one side. A third effort was made by "kitty," with a result that its neck was caught under the wheels of the baggage car and its head was severed from the trunk.

#### Dog's Long Journey Home.

From the London Daily Mail. An instance of the homing instinct in dogs is reported from Buckinghamshire. Con stable Atkinson, having been transferred recently from Wraysbury to Long Crendon, took his retriever dog with him while on night duty. He missed the dog, and on the following morning it was found in its old

By the most direct route the journey is over fifty miles, and had been accomplished in little more than seven hours.

### Big Coon Caught Up-State.

Caledonia correspondence Rochester Herald. The largest coon ever captured in this vicinity was caught one night last week by A. K. Tennant and George Hackett in the

swamp three miles east of Caledonia. The animal weighed 32 pounds, while ordinary coons weigh from 18 to 25 pounds Mr. Tennant chased the coon nearly five miles before he succeeded in treeing it.

### Ring Tailed Wildest Caught

From the St. Paul Dispatch. A ring tail cat, an animal decidedly rare a northern Michigan, has been caught by Herman Thiele, a Negaunee man, in a trap set at Goose Lake, five miles distant. It was the first specimen ever captured by either Mr. Thiele or his father, and together they have been engaged in trapping for the past forty-five years.

The animal has fine, silky gray fur. Though there are some black stripes down the back, the most striking characteristic is a series of black rings around the bushy tail. In this appendage it differs radically from the ordinary wildcat. The wildcat, like the lynx, is possessed of a bob tail, while the ring tail cat has a tail over a foot in length and very bushy.

#### Good and Bad a Weasel Does. From the Kansas City Star.

A Smith county farmer relates an expe rience which he had recently with a weasel He had been noticing dead rats about the barn lately, and was puzzled to account for their but on Monday the mystery was explained.

The dogs got after something, and thinking it was a rat he helped them dig at the hole until he could see that the game was a weasel. He reflected that it would be a shame to kill the weasel when it was doing so much good; and acting upon this thought he drove the dogs off and let the agile little creature slip into a rail pile. Now comes the strange part. He found in the chicken house the next morning twelve dead hens. The farmer is again hunting for that weasel.

## Adventure of a Ship's Cat.

From the Melbourne Argus. The ship's cat of the mail steamer Ortona had a remarkable experience on the last

homeward voyage of that vessel. Soon after the Ortona left Australia the cat was missing, and it was thought that it had been left behind; but when the vessel was thirty-two days out from Sydney one of the engineers heard a faint mewing in the re-frigerating chamber. This chamber, which had not been opened since the vessel started, was promptly examined, and the unfortunate cat was found lying upon a box of butter in a very emaciated condition.

One of its ears and a portion of its nose had been bitten off by the cold, but its fur had grown to a great length during its imprisonment. The cat has since recovered.

## Big Bear Killed by Engine.

From the Jacksonville Times-Union. On the night of December 6, as the Atlantic Coast Line through freight, en route to Jacksonville, arrived within ten miles of Ocala, the engineer noticed a big black object walk on the track and then jump off. When the object again jumped on the track. The engineer could not account for the object and did not stop to investigate.

next morning the northbound passenger train picked up a 400 pound black bear. This bear was turned over to the engineer of the freight train, who has had the skin cured and is keeping it. The citizens of St Petersburg, where the engineer resides,

#### Work of a Beaver Colony. From the North Fork Times.

If the beavers continue their work on dam across the North Fork just above bridge across the river east of Hotchkiss, they will ultimately cause several thousand dollars worth of damage to property in that vicinity when high water cor spring. At present the little fellows have nearly twenty feet of their work completed

and the water is rushing against it without appreciable damage. Mr Thomas Blackwell, who has a lease on the Metcalf property, wrote to the State game warden, asking what can be done about the matter, the law not allowing beavers The warden replied the beavers belonged to the State, but a permit could be granted for \$1 to kill ten or twelve beavers, providing they were doing damage, but that the pelts must be carefully prepared and shipped to the warden for sale, where-

upon one-half of the proceeds will be re-turned for "trouble" in catching them. A dam, such as beavers build, will back the water up onto the Metcalf property and wash away a large part of the place. sides that the beavers are cutting down a large number of trees now on the place and, situated so near town, the growth is of some value.

#### Woodchucks Fought for Bottle. From the Maine Woods.

Bert Pratt of Philips caught in a trap three young woodchacks from one hole. Two of them were black and the other one was red. The red one died and he brought up the other two on a bottle They had a hole in the yard and when he would whistle for them to come out and take their noonday lunch they would come with a great rush and would fight to see which one would get the bottle

#### Timber Wolf Caught in Indiana. From the Indianapolis News.

Indianapolis hunters, armed with bird hot intended for the elusive quail, came across three wolves on the farm of John Oursley, about thirty miles from Indianapolis yesterday. By strategy they captured one of the animals, a timber wolf as large as a setter dog.

J. E. Clark and Jack Abrams sighted the

wolves on the Oursley farm and they went after them, thinking they were large foxes. Two of the animals were some distance away and they scampered over the hills and escaped. The third wolf was chased by Clark's setter dog, and the wolf, after a mile run, took refuge in a hollow log. It held the setter at bay until the hunters came up. It was desired to capture the animal alive

and, still thinking it a fox, one of the men went after Oursley, a blanket and an axe A hole was chopped in the top of the log and a small stick was used in prodding out the wolf. It finally ran out of the end of the log and Abrams fell on it with the blanket. A lively fight followed, and the three men finally overpowered the animal by choking

it. They then tied and muzzled it securely. During the fight the men realized for the first time what they were struggling with a strong wolf and not a fox. The wolf was placed in a wagon and brought to the city. Clark said he would attempt to save the animal's life and keep it as a pet.

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## THE STOVES FRANKLIN MADE.

ONE THE ANCESTOR OF MODERN HEATING APPARATUS.

A Phase of Franklin's Greatness Not Generally Known-New Principles of Heating Discovered by Him-His Theory of the Perfect Fire Still Where He Left It.

Housekeepers in the American colonies during the half century before the Revolution were confronted by a problem quite as serious as any which the obstinacy of kings and parliaments imposed upon their men

folks-a general scarcity of fuel. The time had long gone by when one could cut unlimited quantities of wood in his own back yard, while the least fortunate towns had no adequate supply within one hundred miles. Seven months of winter and no railroads made fuel, as one householder expressed it in 1745, "a very considerable article in the expense of families." Life must indeed have been one perpetual coal strike.

Evidently, under these conditions, the older style of fireplaces, which opened shoulder high and took in a four-foot stick, had become impossible. The wonder is that they were ever tolerated at all. They took more wood than a paper mill and more draught than a blast furnace, "so that," as our colonial householder continues, "the door can seldom be shut; and the cold air so nips the backs and heels of those that sit before the fire that they have no comfort till either screens or settles are provided to keep it off."

By 1740 it had become the fashion so to brick up the old fireplaces as to reduce them nearly to the modern type.

For some reason or other the American olonists, like the Englishman of to-day, had an invincible prejudice against the closed airtight stove such as was in general use in Europe. On the other hand they were unable to adopt the open grate soft coal fire of the mother country, because, though coal had been discovered long before, and the Virginia fields had been worked
fore, and the virginia fields had been worked
factorily solved. The trouble with all as early as 1750, the distance of the deposits from tidewater and the lack of roads made the price of coal higher than it has ever been since. In short, our forebears of the middle of the century warmed themselves as well as they could at open wood fires, and for the

rest went cold. Such, therefore, was the state of affairs when Benjamin Franklin took up the problem. People still call him Franklin the Philosopher, for the sake of the alliteration, but he was little of a philosopher in the modern sense. On the contrary, he was an especially hard headed, practical man who understood equally well nature and human nature, and in the scanty leisure of a life devoted to the service of the State made himself one of the first men of science of

He knew all that anybody knew in his day about heat, combustion and the theory of chimney draught; in fact, some of his ewn discoveries had been in this very field. He knew his countrymen also, and he knew it to be equally impossible to persuade them to adopt at once closed stoves or to satisfy their demand for comfort with open fire places. He devised, therefore, not so much new form of stove as a new system of heating.

The so-called Franklin stove of commerce, which some of us are constrained to use instead of fireplaces because our houses happened to get themselves built between the two fireplace eras, is so far as the name goes an utter fraud. It has no more to with Benjamin Franklin than with Napoleon Bonaparte. Franklin's stove, the Philadelphia fire-

place, as he called it-the old philosopher seem to like alliteration as well as the rest of us-embodied at least two absolutely new principles of stove construction and though the original Franklin stove is as extinct as the ichthyosaurus one or both these principles still appear in almost every modern piece of heating apparatus. America to-day in convenient and efficient

stoves and furnaces altogether outclasses all other countries of the world. She does so largely because other inventors have developed Franklin's ideas. That famous epigram about the lightning from heaven and the sceptres from tyrants might justly have included also some allusion to zero

The Philadelphia fireplace, a stove without a stovepine, stood everywhere clear of the wall and connected with the chimney only through its bottom. It had no legs, but rested flat on the hearth, a portion of which had to be removed to make flues, while a brick wall behind it closed the opening of the original fireplace.

The smoke of the fire, therefore, instead of passing directly into the chimney went along the top of the stove, then down again and under the floor. This down draugh was one unique feature.

The other was that between the two pas sages, at the back of the fire, was the air box, into which fresh air entered from beneath the hearth through a pype opening out of doors. This air after becoming warmed passed into the room through holes near the top of the stove.

There was also a movable front which served as a blower; or, the back damper being shut, converted the fireplace into a closed stove. In whichever way it was used it allowed the gases from the fire

to escape up the chimney only after the had been long in contact with thin plates of metal and had parted with all their available heat.

The Franklin stove is the great-grandfather of all American heating apparatus. The principle of the down draught appears in most parlor stoves. The hot air box enlarged and furnished with a door, be-

comes the oven of the cooking range. Most important of all, the Philadelphia ireplace set up in the cellar and connected with the rooms above becomes a hot air furnace. Junk dealers and collectors of antiquities have claimed its body, but its

soul goes marching on. Franklin, therefore, made the first real stove; the first stove, that is to say, which was anything more than an iron box with a door at one end and a smoke pipe at the other. His was the first heating apparatus, not built permanently into the dwelling, which brought in cold air from outside, warmed it in passage by the waste heat, of the escaping smoke, and passed it on to the apartment; and the first practical con-

trivance of any kind with a down draught. The era which followed was one in which ingenious persons took to inventing improved stoves, as ten years ago they were inventing bicycles and to-day are struggling with automobiles. The change from wood to soft coal and then, at the beginning of the nineteenth century, from soft coal to hard, brought out a host of devices which have finally reduced themselves to the half dozen types of modern stove.

Among others were schemes for passing the hot gases from the fire back and forth under the floor and warming the room from that. One ingenious Frenchman had a revolving grate which, with the chimney in the partition between two rooms, could be turned so as to heat either one. Thus the inventor's fire, as he shifted from cham ber to study, followed him back and forth

like a dog. Franklin himself a year or two before the Revolution took up a problem whi h he was apparently the first man to atta k our stoves is that the fresh coal has to b put on top, where it blankets the fire and distils up the chimney without burning, instead of underneath, as it should be.

There is now upon the market a furnace which works on this latter principle, the fuel being pushed in underneath the fire by a piston worked by a lever. To accomplish this highly desirable result there are but two other possible devices; with both these Franklin experimented.

While he was in France he used a grate for open fires of soft coal, in which the bars surrounded the fire above and below and ormed a sort of basket.

The whole thing was mounted like searchlight, so that the philosopher could turn it flat side up to heat his tea; or as he sat negotiating treaties could point it at the cold place in his back.

Franklin's other device was still more

radical. He ran his fire continually upside down. The fuel and the air were supplied above, the draught was downward through the fire, the burning coal was at the bottom and the flame streamed out below. Nothing therefore could go up the chimney unburned. The single limitation of the device is well stated in the inventor's own words \* \* \* the studious man who is much in his chamber and has pleasure in managing

his own fire will soon find this a machine most comfortable and delightful. To others who leave their fires to the care of ignorant servants I do not recommend it They will with difficulty acquire the knowldge necessary, and will make frequent blunders that will fill your room with smoke. It is therefore by no means fit for common use in families." The stove was probably the most nearly

perfect apparatus ever contrived for burning any sort of fuel, but it required a Fellow of the Royal Society to run it. Nevertheless, there is an idea here that somebody should be able to work out

## Possum, Blinded by Light, Eastly Caught

From the Louisville Courier-Journa. A new and novel ay of hunting 'pos has been furnished by the motormen of Prospect line. "One admirable featu our hunt," said one of the motormer the fact that it does not interfere regular duties, and is without the usua worry of an all night's hunt with the possi bility of returning with the 'hunter's luck for our pains.

"Mr. Possum objects to a light of any kind, but when the bright headlight of a car turning a curve is flashed in his eyes he immediately blinded and drops in his trawhen I stop my car and pick him up method of hunting has proved so s that the tables of the motormen ranning between Louisville and Prospect are kept supplied plentifully with 'possum meat.

## Getting a Confession

From the Lewiston Journa Just as a certain Sunday school of the town was about to be dismissed the other day, & little girl with roguish eyes sat up in her seat of the back row and took notice. "Teacher," said she with the gravest expression, "which is right, I is a fool or I are a fool?"

Teacher looked both grieved and surprise and replied on the instant, "'I am a fool' is right my dear!" Whereupon the whole school passed from

titters to the loudest of unrestrained merri

OF REAL PROPERTY.

day. They sat on a bench near the mauso-"We won't see many more days like this,"

situation.